

Notice of Allowability

Application No.

10/731,089

Applicant(s)

SASAGAWA ET AL.

Examiner

Maki A. Angadi

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/6/2007.
2. ☒ The allowed claim(s) is/are 1-27.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

LAN VINH
PRIMARY EXAMINER Maki Angadi

Allowable Subject Matter

1. Claims 1-27 are allowed.
2. The following is an examiner's statement of reasons for allowance:

With respect to claims 1 and 5, the closest prior art of Samavedam (US Pub. No. 2004/0023478) fails to disclose or suggest a method of manufacturing a semiconductor device that includes the steps of: "performing a plasma treatment to the first conductive layer and the second conductive layer after etching the second conductive layer; and etching a tapered portion of the second conductive layer after performing the plasma treatment to the first conductive layer and the second conductive layer" as defined in applicants' amended independent claims 1 and 5.

With respect to claims 9 and 14, the closest prior art of Samavedam (US Pub. No. 2004/0023478) fails to disclose or suggest a method of manufacturing a semiconductor device that includes the steps of: "performing a plasma treatment to the first conductive layer and the second conductive layer and the third conductive layer; and etching a tapered portion of the second conductive layer after performing the plasma treatment to the first conductive layer, the second conductive layer and the third conductive layer" as defined in applicants' amended independent claims 9 and 14.

With respect to claims 19 and 23, the closest prior art of Samavedam (US Pub. No. 2004/0023478) fails to disclose or suggest a method

of manufacturing a semiconductor device that includes the steps of: "etching a tapered portion of the second conductive layer after performing the plasma treatment to the first conductive layer and the second conductive layer; and adding an impurity elements to the semiconductive layer with the second conductive layer as a shielding mask to form a region with the impurity elements in the semiconductor film after etching the tapered portion of the second conductive layer" as define in applicants' amended independent claims 19 and 23.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maki A. Angadi whose telephone number is 571-272-8213. The examiner can normally be reached on 8 AM to 4.30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine G. Norton can be reached on 571-272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/731,089
Art Unit: 1792

Page 4

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dr. Maki Angadi
Examiner
Art Unit 1792

LAN VINH
PRIMARY EXAMINER

